

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claims 1-49 (canceled)

Claim 50 (currently amended): A protein complex comprising five monomeric fusion proteins;

where each fusion protein comprises a cholera toxin B subunit linked at the 3' end of the cholera toxin B subunit to a first immunogenic antigen from a causal factor of a first mammalian disease; and

where the antigen elicits a protective response to the disease.

Claim 51 (previously presented): The protein complex of claim 50, where the first immunogenic antigen is a rotavirus antigen.

Claim 52 (previously presented): The protein complex of claim 50, where the first immunogenic antigen is an enterotoxigenic *E. coli* antigen.

Claim 53 (previously presented): The protein complex of claim 50, further comprising a second cholera toxin subunit.

Claim 54 (previously presented): The protein complex of claim 53, where the second cholera toxin subunit is cholera toxin A2 subunit.

Claim 55 (previously presented): The protein complex of claim 50, further comprising a second immunogenic antigen from a causal factor of a second mammalian disease.

Claim 56 (previously presented): The protein complex of claim 55, where the second immunogenic antigen is a rotavirus antigen.

Claim 57 (previously presented): The protein complex of claim 55, where the second immunogenic antigen is an enterotoxigenic *E. coli* antigen.

Claim 58 (previously presented): The protein complex of claim 50, where the first mammalian disease is an infectious enteric disease.

Claim 59 (previously presented): The protein complex of claim 50, further comprising a cholera toxin A2 subunit linked to a second immunogenic antigen from a causal factor of a mammalian disease.

Claim 60 (previously presented): The protein complex of claim 59, where the first immunogenic antigen is a rotavirus antigen.

Claim 61 (previously presented): The protein complex of claim 59, where the second immunogenic antigen is an enterotoxigenic *E. coli* antigen.

Claim 62 (previously presented): The protein complex of claim 59, where the first mammalian disease or the second mammalian disease or both the first mammalian disease and the second mammalian disease is an infectious enteric disease.

Claim 63 (currently amended): A protein complex encoded by a DNA construct that encodes, ~~upon expression in a plant cell,~~ a protein complex comprising five monomeric fusion proteins when expressed in a plant cell;

where each fusion protein comprises a cholera toxin B subunit linked at the 3' end of the cholera toxin B subunit to a first immunogenic antigen from a causal factor of a first mammalian disease; and

where the antigen elicits a protective response to the disease.

Claim 64 (currently amended): A protein complex encoded by a DNA construct that encodes, ~~upon expression in a plant cell,~~ a protein complex when expressed in a plant cell, the protein complex comprising:

a) five monomeric fusion proteins, where each fusion protein comprises a cholera toxin B subunit linked at the 3' end of the cholera toxin B subunit to a first immunogenic antigen from a causal factor of a first mammalian disease, and where the antigen elicits a protective response to the disease; and

b) a cholera toxin A2 subunit linked to a second immunogenic antigen from a causal factor of a mammalian disease.

Claim 65 (withdrawn): A method of inducing partial or complete immunity to an infectious disease in a mammal comprising providing to the mammal for oral consumption an effective amount of the fusion protein of claim 50.

Claim 66 (withdrawn): A method of inducing partial or complete immunity to an infectious disease in a mammal comprising providing to the mammal for oral consumption an effective amount of the fusion protein of claim 59.

Claim 67 (withdrawn): A method of inducing partial or complete immunity to an infectious disease in a mammal comprising providing to the mammal for oral consumption an effective amount of the fusion protein of claim 63.

Claim 68 (withdrawn): A method of inducing partial or complete immunity to an infectious disease in a mammal comprising providing to the mammal for oral consumption an effective amount of the fusion protein of claim 64.

Claim 69 (previously presented): The protein complex of claim 63, where the first immunogenic antigen is a rotavirus antigen.

Claim 70 (previously presented): The protein complex of claim 63, where the first immunogenic antigen is an enterotoxigenic *E. coli* antigen.

Claim 71 (previously presented): The protein complex of claim 63, further comprises a second cholera toxin subunit.

Claim 72 (previously presented): The protein complex of claim 71, where the second cholera toxin subunit is cholera toxin A2 subunit.

Claim 73 (previously presented): The protein complex of claim 63, further comprises a second immunogenic antigen from a causal factor of a second mammalian disease.

Claim 74 (previously presented): The protein complex of claim 73, where the second immunogenic antigen is a rotavirus antigen.

Claim 75 (previously presented): The protein complex of claim 73, where the second immunogenic antigen is an enterotoxigenic *E. coli* antigen.

Claim 76. (previously presented) The protein complex of claim 63, where the first mammalian disease is an infectious enteric disease.

Claim 77 (previously presented): The protein complex of claim 63, further comprising a cholera toxin A2 subunit linked to a second immunogenic antigen from a causal factor of a mammalian disease.

Claim 78 (previously presented): The protein complex of claim 77, where the first immunogenic antigen is a rotavirus antigen.

Claim 79 (previously presented): The protein complex of claim 77, where the second immunogenic antigen is an enterotoxigenic *E. coli* antigen.

Claim 80 (previously presented): The protein complex of claim 77, where the first mammalian disease or the second mammalian disease or both the first mammalian disease and the second mammalian disease is an infectious enteric disease.

Claim 81 (previously presented): The protein complex of claim 64, where the first immunogenic antigen is a rotavirus antigen.

Claim 82 (previously presented): The protein complex of claim 64, where the first immunogenic antigen is an enterotoxigenic *E. coli* antigen.

Claim 83 (previously presented): The protein complex of claim 64, where the second immunogenic antigen is a rotavirus antigen.

Claim 84 (previously presented): The protein complex of claim 64, where the second immunogenic antigen is an enterotoxigenic *E. coli* antigen.

Claim 85 (previously presented): The protein complex of claim 64, where the first mammalian disease is an infectious enteric disease.

Claim 86 (previously presented): The protein complex of claim 77, where the second mammalian disease is an infectious enteric disease.